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CONTENTS.

Agriculture—Shearing Records—Shall the Northern Cow be Bred for Dairy or Beef?—Broom Corn—Sheep Shearings—The Horse—The Horse as a War Animal—The Horse-Tamer—Conquest of Glanders—A Horse-Tamer—Conquest of Vicious Horse—Horse Gastritis—The Farm—Butter-Making in France—Washed Unwashed Wool—Small and Large Wheat—Agricultural Items—The Pastoral Yard—Horticulture—The Curious and Curious—Saw-Pit—The Market for Apples—The May Spraying for Orchard Pests—The Muskmelon—The California Dried Fruit Crop—Horticultural Notes—Wheat—Corn and Oats—Dairy Products—The Farmers are Teaching—Michigan Horticultural Society—The British Grain Trade—The Visible Supply—Stock Notes—News Summary—Michigan—Port Huron—Portland—Medicinal Properties of Honey—Poetry—Never Satisfied—A Memory—Marmalades—John's Story—The Red Snow Alga—That is Poisonous—Blind Tigers—Driving Men from Employment—Irish Fire-Breathers of Forests—The Washington's Sons—The Sons of George Bush—A Southern Girl—Inventive Cranks—He Skipped a Sale—Honorable Reward—Are Twice Two Four—National Honor—The Nutting—Two Cents—The Story of Exported Cattle Varieties—Chaf—Shearings in Cattle—Culture of the Potato—Veterinary—Heavy Winter Feeding, Little Exercise, Purging Horses—Oedema and Lameness in a Mare—Grub in Sheep—Gommerland.

Agricultural.

SHARING RECORDS.

The Coldwater Republican, which, by the way, is one of our most valued State exchanges, takes strong exceptions to the paragraph in a recent issue of the FARMER respecting a Mr. Bell and his "private" shearing records. The Republican takes a just pride in the reputation of the breeders of improved stock in Branch County, and respects joking over the improbable records with which Mr. Bell's flock is credited. It copies the item and says:

"The jealousy of the State Association and the FARMER could be no better exhibited than in the tone of the above item. Mr. Bell has good herds in which to care for his sheep; more than that he does take excellent care of them during all seasons of the year. He makes the business a study and there is no better judge of sheep than he. He is not engaged in running to every public show in the State to exhibit a few select animals; but he is a flock, all through, that cannot be beaten by that of any breeder in Michigan. The weighing and the shearing of Mr. Bell's sheep are in the presence of interested parties, whose names are just as good as that of any member of the State Breeders' Association. The facts were reported for the Republican as accurately as though they had appeared in the MICHIGAN FARMER."

The idea of the State Association being jealous of Mr. Bell is too ridiculous to deserve attention. Probably four-fifths of the members never heard of him, and certainly would pay no attention to his "private" records. As to ourselves, we never saw Mr. Bell, and never heard of him except on two occasions. Two years ago we noted in the Republican that his stock ram had sheared 44 pounds. Last year there was not a squeak from Mr. Bell that we could hear, and the weight of his ram's fleece was not published in the Republican, so far as we could learn, although we watched to see how well he would do. This year he is again at the front with a wonderful report. Now here is where the joke comes in. Mr. Bell is not "running around" to State shearings for two reasons: He would have to shear before a lot of men who would see he got no more wool than he was entitled to, and that the day's growth of the fleeces was properly authenticated, two points upon which his published records are delightfully uncertain; and, secondly, there is no use of his going to a public shearing when he can stay at home and have the editor of the Republican publish his big reports without a suggestion that they were not all right. The difference between the editor of the FARMER and the editor of the Republican is simply that one accepts improbable statements which he cannot verify, and the other insists on something more than the statements of the interested party before he considers them worthy of public mention. The editor of the Republican is no doubt entirely honest in his opinions as to the merits of Mr. Bell's sheep, but he must allow us to doubt very strongly if they ever made the record he publishes. Let us give another example of it:

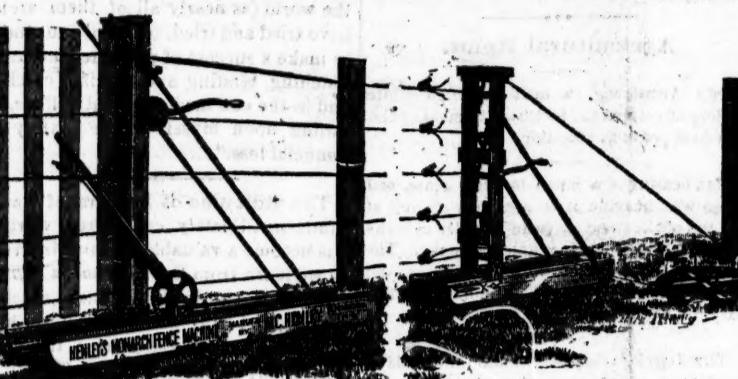
"The average weight of the 31 ewes' fleeces at the State shearing festival at Ann Arbor, being taken from sheep picked out of the flocks of 12 different breeders, was 16 lbs. 6 oz.; while the average weight of the fleeces taken from 33 sheep belonging to Mr. Bell was 17 lbs. 14 oz., or 1 lb. 8 oz. in favor of Mr. Bell's individual flock. The average of the 17 bucks, from the flocks of 10 different breeders, shown at the public shearing at Ann Arbor, was 21 lbs.; while the average of 12 shown at Mr. Bell's was 35 lbs. 8 oz., or 4 lbs. 8 oz. in favor of Mr. Bell's flock. Isn't it about time the FARMER conceded that a private citizen who lives out in the country can raise just as good sheep as any breeder who has a card of membership in the State Breeders' Association?"

There is not a person but Mr. Bell knows what most of those fleeces weighed when taken from the sheep; not a person knows, except the owner, the length of time those fleeces were growing, or even the sheep they were taken from! How do we know this? Why, from the statements of the editor of the Republican. Read

the following extract from the next issue of that paper:

"In a previous issue we mentioned a visit at Mr. Bell's, in Tekonsha township, to witness the shearing of a few of his sheep. We then gave the result of those we saw sheared, but we agreed, in company with others, to be present at the weighing of the several fleeces on a day fixed. He commenced shearing on Tuesday, April 6, and closed up on Saturday, April 10. On Wednesday, April 14, with Messrs. Robinson, J. R. Dickey, Fred Hall and Tant Grinnell, we made the promised visit. The weighing was done upon a pair of platform scales from the Buffalo Scale Works. Mr. Dickey acted as weighmaster, the fleeces were handled by Mr. Hall, and the record was made by Mr. Aldrich."

Oh, guileless gentlemen! The fleeces were shorn and put up four days before your arrival. Mr. Bell told you which was which, and you weighed them out in good faith and recorded them, giving your endorsement to statements of whose truth you in reality knew nothing! And then to go and "give the snap away" in this guileless fashion is really too good. Four days to "arrange" the fleeces for weighing! It will be the beginning of wisdom in the sheep business if the editor of the Republican will be on hand one year from the date Mr. Bell's ram was shorn, see him again sheared, and publish the record—if he can get it.



Henley's Improved Monarch Fence Machine.

bred bull and how fast they are being brought in to our midst. Now you who breed Shorthorns for beef, what are you going to do with your bulls, are you going to keep them at home and let others come and dispose them with dairy-bred cattle? They are surely doing it, for our Shorthorns lack the breeding for the purpose of wisdom in the sheep business if the editor of the Republican will be on hand one year from the date Mr. Bell's ram was shorn, see him again sheared, and publish the record—if he can get it.

take the Shorthorn that has been bred for the dairy, and get the greatest dairy cow known forty years ago. She has lost the quality that once made her the great favorite wherever known, through neglecting her dairy qualities. If this be a fact, let us strive to regain the lost laurels of forty years ago, and supply the present demand for farmers' cattle by breeding her for dairy purposes.

W. G.

BROOM CORN.

To the Editor of the Michigan Farmer.

Will you please inform me what is good soil for growing broom corn, and whether the climate as far north as the central line east and west is suited to the cultivation as regards frost. The time of planting, the treatment in cultivating and curing the same, and the best variety. Also please give the address of any parties engaged in the manufacture of brooms in Detroit.

A NEW BEGINNER.

Broom corn is a species of sorghum; it does best on moist, rich, alluvial soil, but any land which will grow good corn will do for broom corn, and any climate where dent corn will mature will be warm enough, although the plant comes originally from a warm latitude. The ground is prepared the same as for corn, and is planted in rows three feet apart generally, so as to allow the use of the cultivator. The seed is sometimes planted in hills about 18 inches apart, while others plant in three feet apart in the hill so as to allow the use of the cultivator both ways. The seed sold is frequently worthless from various causes, and this is one of the great difficulties a new beginner has to contend against. The best way is to test the seed before planting, the same as you would seed corn. Use the cultivator to keep the weeds down until the plants are a foot or fifteen inches high. If a double mould-board plow can be used the last time, throwing a furrow against the roots of the plants, it is a good thing for them but a good cultivator, arranged to throw the soil towards the plants will do as well. To secure the best quality of brush it should be harvested just as the seed is beginning to form and the blossoms to fall. Then go along the rows and bend the stalks about two and a half or three feet above the ground so as to break them, turning the tops of each two towards each other, so as to make it more convenient to cut off the tops. The cutting is done immediately afterwards. There are some dwarf varieties that this process is not necessary with. In cutting the tops leave about six or eight inches of the stem below the brush, and place in piles. It should be put under cover to cure so as to secure a good color and tougher brush. When cured, which requires a few days, the brush is passed through a machine which scrapes off the seed, and is then ready to bale and ship to market.

As to best varieties, the tall kind is generally regarded as the best. When you secure a good stand, allow some of it to mature so as to have seed you can rely upon. Chicago is the headquarters of the broom-corn trade, and that market is generally relied upon to furnish seed.

It is said there are 13,000,000 cows in the United States, and 65,000,000 people. Suppose 100 pounds of butter be made from each cow per annum, these cows would furnish less than one-half pound per week for each person, which is not enough. Now there is a demand for more butter than we are able to produce; this accounts for the great increase in the dairy business, and the so-called dairy breeds; they are in greater demand than beef breeds. We are in want of more and better dairy cows than we now have, and there are none that will excel the Shorthorns for dairy purposes, if they be bred for it. But the most of our breeders say we want a large calf, yes, beefy, to a large cow, and we don't care how little milk, if only she will raise a calf. Yes, you want a large hay mow and corn crib and they will be empty before spring, for many of our breeders of Shorthorns for the beef are buyers of feed; they don't seem to be able to live within their income of feed, and they have to go down in their pockets for cash to pay for meal, hay and hired labor, as there is no cash coming in except for sale of calves or dry cows. No hogs are raised; the calves suck the milk and dry cows eat the meal, and yield no certain returns. A beef calf and beef cow are very nice to look at, but the question is, does it pay to carry a dry cow two years for one calf, as is often done, on our high priced lands with dear fencing and costly buildings. I argue we cannot afford any such thing. This may do for those who graze United States land, and have no investment in lands nor buildings. But what is wanted for farmers in mixed husbandry (for they raise the majority of the cattle) is a cow that will pay her own way in milk and butter, and not be dependent upon some profitable office, a government appointment, or the proceeds of some more paying investment, to make accounts balance. Give me a cow that can supply the family with good milk and butter, and then skim milk for the calf, and after that some milk for the pigs, and some butter to sell; with plenty of butter or dairy products to sell, we need not fear the tax gatherer's call; the butter made from cows bred right will be in abundant supply to pay all necessary running expenses of the farm. These calf-vendors who have given the calf the run of the cow, fed both with the best the farm affords, and some expensive hay, meal and oil-cake, will wish some one would come and buy that great lumber bull that is quite sure to go down on some one's hands; for having been over-fed and over-grown, he has no muscle and no vital power, and is sent out to show what beef will do. One thing I assure you he does do; he ruins the reputation of our cattle; and hurts the pocket of those who invest. I would advise farmers to steer clear of these beef vendors, and

SHEEP SHEARINGS.

At St. Johns, Clinton County.

The third annual shearing of the Clinton County Wool-Growers' Association was held at St. Johns, Friday, April 23. The day was all that could be wished for, and by nine o'clock a crowd had assembled, which was increased largely after dinner. The exhibition present, with the sheep and ewes by them, were as follows: J. W. Besley, of Greenbush, showed 12 head, seven rams and four ewes. R. B. Carus, of Essex, showed nine head, two rams and seven ewes. Carus Brothers showed one ram and four ewes. A. H. Warren, of Ovid, showed five head, two rams and three ewes. DeCamp, of Ovid, showed five head, two rams. Chas. Walters, of Riley, showed three head, two rams and one ewe. Theron Shaver, of Ovid, showed two rams and three head of grades. E. Osborn, of Greenbush, showed one ram and five head of grades. Bros. & Manning, of Birmingham, DeCamp, Sec'y.

DECISIONS, See.

DESCRIPTOR.

Label Number.	Name of Owner.	Name of Breeder.	Sex.	Name of Sheep.	Name of Sire.	Description.	Length.	Width.	Covered.	Weight.
									In.	Ounces.
70	S. B. Lusk.	B. Hill Ball.	Male	Bally No. 70.	Emper.	Star Bismarck 504.	365	24	5	34
70	J. W. Besley.	A. J. Towler.	Male	Stekins F. 45.	Emper.	Star Bismarck 504.	365	24	4	32
70	William Byrnes.	R. B. Carus.	Male	Colonel.	Emper.	Star Bismarck 504.	365	24	4	32
70	DeCamp.	G. H. Mack.	Male	C H Mack 5.	Emper.	Star Bismarck 504.	365	24	4	32
70	E. W. Besley.	G. H. Mack.	Male	Victor.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Emper.	Star Bismarck 504.	365	24	4	32	15
70	W. L. Carus.	L. P. Clark.	Male	Luck 124.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Rex 406.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	L C Remale 73.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	John 100.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Winkie.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Bally 46.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Star Bismarck 504.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	F H Farrington 514.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	John 100.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Winkie.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Star Bismarck 504.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	John 100.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Winkie.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Star Bismarck 504.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	John 100.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Winkie.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Star Bismarck 504.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	John 100.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Winkie.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Star Bismarck 504.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	John 100.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Winkie.	Emper.	Star Bismarck 504.	365	24	4	32
70	W. L. Carus.	L. P. Clark.	Male	Star Bism						

The Horse.

A MICHIGAN BREED COLT.

There was recently foaled at the Cooper Stock Farm, near Birmingham, in this State, an exceedingly well bred colt, the property of F. A. Baker, of Detroit.

The two great trotting families, are those founded by Hambletonian and Mambrino Chief, and this colt is inbred to both these sires, but more strongly to the latter. It has two lines to Hambletonian, and four to Mambrino Chief, with one cross to Pilot Jr., and one to Brown's Bellfounder. In addition it has two thoroughbred crosses through Crusader and Zenith, both of whom trace to Imp. Diamond. It will be of interest to breeders to know that the colt, trotting breed as he is, when started up at the side of his dam, is a pure gaited and fast pacer. The only known pacing cross in his pedigree is through Pilot Jr. to Old Pacing Pilot, but a yearling filly from the same mare, by Sorrento, who has two crosses to Mambrino Chief and one to Pilot Jr., through Tattler, has never passed a step in her life. Here is certainly a text for *Walpole's Monthly*.

Mr. Baker has named his colt Teusha Grondie, the name of the Indian village that was located on the site of Detroit and immortalized in verse by the late Levi Bishop.

To enable our readers to study this pedigree we present it in tabulated form.

TEUSHA GRONDIE.

Sparsities	Jobs
Queen Lizzie	Belmont
Sally Anderson	Belle
Mambrino Chief	Son of Zephyrus
Hambletonian	Alderman
Hambletonian	Dan'l Brown
Hambletonian	Bellfounder
Mambrino Chief	Mambrino Chief
Mambrino Chief	Pay

THE INFECTIOUSNESS OF GLANDERS.

CALDONIA, April 26, 1886.

To the Editor of the Michigan Farmer.

In your answer to my last article in your paper, published some time ago, about glandered horses, you made some statements which, according to our best authority, are wrong; but of course you ought to know more about it than I do, as my business is simply farming.

I do not feel that it is doing me justice to let the matter rest as it is, without giving the readers of your paper my authority for making the assertions that I did.

You say it is the exception for a single animal to escape when fresh virus is used for inoculation. George Fleming, one of the highest veterinary authorities in the world, states in his *Veterinary Journal* for March, 1876, page 193, as follows: "Experimentation has been in vogue to discover the average susceptibility of animals, and though it is not likely to be always the same, yet it has been found that among horses brought into intimate contact with those which were glandered, only about 20 to 30 per cent became affected. Direct inoculation has only yielded 35 per cent of successful inoculation." Fleming's statement is repeated substantially in his "Veterinary Sanitary Science and Police." The same thing has been proved by the experiments of Prof. Sirdamgrotz, of Berlin, by Prof. Bollinger, of Munich, and Prof. Bonney, of Alford, and reported in the German and French veterinary journals.

You say inoculation with glandered matter means death, in man or in the horse. In order to prove that fact you will have to overthrow the above experiments of some of the principal veterinarians in the world. But inoculation with other specific virus does not mean always death, nor even the production of diseases. The success or failure of an inoculation depends upon the age, race, etc., and previous physical condition of the subject, as the experiments made in syphilis, tuberculosis, anthrax, and other diseases prove.

I perhaps ought to have written more plainly about horses with glanders eating and working as well as ever. I meant only those having chronic glanders. The above facts are not some of my own origin, but are what I found in the works of some of the best veterinarians in the world.

I would like to know your authority when you say, "it is the exception for one to escape the effect of inoculation."

F. C. MCPHERSON.

A Horse-Tamer Conquers a Vicious Horse.

The usual good-sized crowd attended Professor Gleason's horse-training entertainment at the Cosmopolitan Theatre last night to watch the changing of a man's best four-legged friend from a savage, intractable brute into a docile, intelligent helper.

The first subject brought into the sawdust-covered arena last night was a beautiful sorrel thoroughbred gelding from Horheimer's Riding-academy at Hoboken.

The trouble with this horse was his great objection to being shod. After a little preliminary handling during which the white-legged sorrel showed himself very nervous and rather intractable. Professor Gleason called out to see if the owner was in the building. He was answered from the front gallery and the ownership of the horse, his character, and the fact that the trainer had never seen him all certified to.

The teacher was about to commence the educating process, after offering \$5 to any one who would come in and lift the horse's foot, when several gentlemen in the audience called out that they had both ridden and driven the horse then in the ring. The audience was wild in a moment—it looked like a big expose. Gleason was equal to the occasion, and called out that he hadn't affirmed that the horse couldn't be ridden or driven, but that he couldn't be shod.

"And now," he went on, "I will give \$5 pulling out a bit horse, to any one of you who will roll me in this ring and lift up any one of the animal's feet."

After a little practice the gelding was thrown amid great applause after a desperate struggle, and submitted to having his front feet raised, but when his left hind foot was raised by means of a rope around a wooden pin bound into his tail, there came a tug-of-war. A more vicious kick was never seen. Several new holds had to be taken before he could be conquered.

Once the racer won applause by letting fly so savagely as to break the strong rope that secured his foot, and his hoof just grazed the side of "John's" head. The experiment was at last a complete success, and loud applause was given the perspiring pedagogue.

The battle occupied one hour and thirty-five minutes, and the Professor said it was as hard a one as any one of the 7,000 victorious animals he has handled ever gave him. He said he could have succeeded by the use of the "double Bonaparte" bridle in half an hour, but did not wish to be severe on account of a sore in the mouth from which the horse was suffering.

Several other horses, one of them a "genius kicker," were then put on the road to complete recovery from the woes at present afflicting them.—N. Y. Morning Journal.

Horse Gossip.

TOM CHALONE, one of the most noted of English jockeys, died on April 24th. He rode the winners of five St. Leger's.

THISTLE, a well known race horse owned by Mr. Speth, of Louisville, N. Y., has died from being cut in the leg by a piece of glass.

The guaranteed stakes of \$5,000 for the 3:30 class of horses at the Detroit meeting, and the same amount for the 2:25 class at Cleveland, closed May 1. Horses will be eligible until dated of last payment, Detroit, July 10; Cleveland, July 17.

It is reported that the stewards of the English Jockey Club have adopted a motion to add to Rule 40 a provision for the exclusion of Irish and foreign horses from English handicaps. They do this on the ground that they cannot properly handicap horses about which they know nothing.

The sale of trotters at Cleveland, Ohio, on the 13th inst., will include among others the horse George V., 2:30; Tom Allen, 2:22; Tommy Norwood, 2:28½; Green Castle, 2:26½, and King Phillips, 2:31. These horses will be run Friday at the Newmarket first spring meeting, and was won by the Duke of Hamilton's bay filly Miss Jumby. Prince Soltis' bay filly, Argo Navis, came in second, and Lord Zetland's brown filly, Jewell Song, third.

A CABLE dispatch says that the race for the 1,000 guineas stakes for three year old fillies was run Friday at the Newmarket first spring meeting, and was won by the Duke of Hamilton's bay filly Miss Jumby. Prince Soltis' bay filly, Argo Navis, came in second, and Lord Zetland's brown filly, Jewell Song, third.

THE Rochester, N. Y., Driving Park Association propose to inaugurate a novel method in conducting trotting races. They have opened a stake to be trotted on July 4th, to be called the Grand Free-to-all Trotting Tournament, with \$500 entrance, \$150 to accompany nomination, \$150 on June 15th, and \$200 on July 10th. The Association adds an equal amount to the stake for each horse that starts. If there are four or more competitors, the contest will be a single heat between each and every horse, but if there are only three contestants, each contest will be two heats in three between each and every horse, the Association adding the further sum of \$350 for each horse starting, which will constitute a separate fund, the amount of which will be divided by the number of single contests which shall constitute a purse for each single contest of the tournament. This is to avoid a large field of horses, and to give each horse an even chance for winning.

AFTER two years trial, we unhesitatingly pronounce the Boss Zinc and Leather Collar Pad the only durable and successful one that we have ever used. It retains its shape, is cooling, prevents chafing, and thereby keeps the horse's neck clean and healthy. Hiram G. Dodge & Sons, Wood and Coal Dealers, Madison.

General Observations on Foods and Climates—Methods of Cream-Raising and Churning—How Butter-Substitute Frauds are Treated in France.

From our Paris Correspondent.

The tide by necessity has set in to develop butter industry. The point sought to be popularised, is creaming the milk at low temperature. Butter is the fatty part of the milk, and enters to the extent of 85 per cent into its composition. The rest is caseine, water, and salts. Naturally the percentage of butter will vary with the breed of the cow, climate or season, and food. Thus an Ayrshire will give more milk than an Alderney or Brimley cow. Temporarily humidi, rather than hot and dry climates and seasons, are more propitious for the secretion of milk; and nutritive feeds rather than ashes, for securing quality. If a cow be kept chiefly on brewers' and distillers' grains, she will yield much milk, but the ingredients of the latter will be extracted from her system; hence, why cows so fed are skin and bone. The best butter-fed are carrots. Richness can be secured by supplementing the ordinary rations with fat-yielding food, as cotton seed meal. Some continental farmers give from one and one-half to three quarts of this meal, daily to their cows all the year round, maintaining that the nearer the animals are kept on the lies intended for the butcher, the more superior the butter will be. In Normandy, where extreme care is observed in butter-dairies, cows will often not be kept after their third calf.

The daily annual average milk from a cow, varies from 4½ quarts to eight quarts; ten quarts of milk will produce one pound of butter, and four pounds of cheese. In some parts of France, 28 quarts of milk are required for one pound of butter, while that quantity in the case of a Jersey cow, suffices for the same amount of butter. The name or designation of washed wool has ceased to have any charm, and the sooner

the practice of washing is entirely abandoned the better it will be for the sheep and their owners and the trade generally.

Small and Large Wheat.

It is worth noting, says the *Northumbrian Miller and Baker*, of Glasgow, Scotland, by the miller who may not have yet observed the fact, that a large grain of wheat contains less percentage of bran and a corresponding greater percentage of flour.

Churing has the effect of breaking the membrane of the little sac in the milk or cream, enclosing the fatty or butter ingredients, and these agglomerate like the rolling of a snowball. In Normandy, the hand-dash turns at the rate of 85 to 40 strokes per minute; when driven by steam or horse-power, fifty revolutions are the rule. Isigny farmers prefer a temperature of 57 deg. Fahr. at the time of putting the cream and milk into the churn—the temperature is raised ten degrees by the churing, and fifteen minutes in summer, and often 60 in winter, are necessary before the butter can be taken off.

The "Normandy" is the favorite churning, barrel-shaped, 38 inches long and 32 in diameter, working on supports. The thickness of peal being the same in each of two apples, the smaller specimen will contain the larger percentage of peal when compared with the whole apple. So is it with other grain. This is based upon a well-known geometrical principle that the solidity (or contents) of any round or nearly round body increases in a more rapid proportion than its surface. Large grained wheat, then, will yield a smaller percentage of bran, and therefore sixty pounds of large grained wheat will yield more flour than sixty pounds of small grained wheat.

Agricultural Items.

THE Armstrong, a medium sized white variety of corn, is the sort used in making the new food product, cereale.

The hearing of a horse is very acute, and those who imagine it is necessary to yell at the top of the voice at them in order to make them labor under a great mistake. The habit of screaming at horses is useless, and should not be allowed. The more quiet and easy you handle your horses the better.

THE American Culturist thinks the first day's work at plowing in the spring should require two days to do it. Allow the team to rest frequently and draw away the collar from the breast when the latter is wet with sweat to let it cool off. Plowing is rather too hard work for horses that have been kept idle most of the winter.

THE American Culturist takes a gloomy view of the agricultural outlook, saying there are few signs of an increase in prosperity, but high-priced land has in many cases lost so much of its fertility that even with laboring machinery it cannot be worked at a profit and pay interest on cost. When this is the case a reduction in price of land is as certain as is the existence of the causes leading to it. These causes are slow to operate but they are sure. Land is already somewhat cheaper than it was two, three or four years ago, but it will probably have to go still lower before the tide will turn.

PAP. E. W. STEWART says, in the *Country Gentleman*, concerning buttermilk as a diet for young stock: "Buttermilk has been found appropriate food for pigs; sometimes it is difficult to feed to calves without causing scouring, but the writer has never had this experience when a small quantity of buttermilk has been given two or three times per week. In feeding a large number of pigs, buttermilk should be kept on hand to regulate constipation and scouring. It may seem a contradiction to feed buttermilk for scouring, but there is nothing better, fed in small quantity. It is very soothing to the digestive organs. If corn meal is fed with skimmed milk, it should be first cooked, or it will be very apt to derange the digestion. It is better to feed middlings with the milk to young pigs, or half-cooked meal with the water all without delay.

At a meeting of poultry breeders held at Boston, Mr. A. C. Hawkins said:

"When I began breeding fowls, some

years ago, I was determined to keep

only that variety of fowl which combined

the most practical merit for a general market, and with this end in view I made

many experiments both with crosses and

thoroughbreds. The Light Brahma, Ply-

mouth Rock, Brown and White Leghorn,

Houland and Rouen were all tried in their purity, and were also crossed with each other to

increase the laying qualities of some and

the weight of others, keeping nothing

further than a first cross. Repeated ex-

periments proved to me that there was no

fault, either half blood or pure blood,

that combined so many practical qualities as

Plymouth Rock in its purity. The

qualities of this variety are too well

known to need comment. They have been

conceded to be the finest table fowl that

enters our markets. Within the last two

years they have met their strongest rival

in the Wyandotte, which I believe will

prove one of the most valuable fowls for

the farmer. They are great layers, above

the size of Plymouth Rock, in weight,

but very plump and yellow when

dressed."

THE *Advertiser* says: There is a point to

be noted in the culture of potatoes—a point

that may be quite new to many persons who

have raised potatoes extensively. It is that

digging the tubers from the sides of hills

when they are half matured will not im-

pede the growth of those that are left; in fact,

there is some reason to believe that growth is

stimulated. It is not profitable to dig out

whole hills when getting early potatoes from

the garden, because the yield will be so light

as to give very small return for care employed

in raising. A little earth can be removed from

each side of the hill, and tubers of edible size

can be removed without further disturbance to

the hill, and those that are left will grow so

much larger because of increased support that

the yield will be nearly or quite as great as if

the earlier ones were not removed.

As a CORRESPONDENT of the *Prairie Farmer* writes: "I have been breeding bones and

announcements of the way of eggs.

In the location of the poultry yards is

changed once in every two or three years

comparatively immunity from disease, es-

Horticultural.

For the Michigan Farmer.
CURRENT AND GOOSEBERRY SAW-FLY.

By C. P. GILLETTE.

This most serious pest of our currant and gooseberry bushes is appearing in large numbers this spring. The little larva have already begun to defoliate the bushes in the vicinity of the Agricultural College, and unless remedies are speedily applied we shall be robbed of our entire crop of currants and gooseberries this year.

SHIPMENT AND SOURCE.

The first shipments from the beginning of the season to April 5 from this country and Canada were 867,710 lbs. against 771,496 lbs. last year. The shipments from Boston have been this season 229,006 lbs. against 307,307 lbs. last year. The shipments from New York have been 449,556 lbs. against 249,927 lbs. last season. The shipping season is now about over though the large amount of apples now on hand may cause a considerable number of shipments. Maine furnishes the best apples and the largest quantity of them. New Hampshire generally furnishes considerable, Rockingham County being a great apple region.

The Massachusetts apples come mainly from Essex and Middlesex Counties, though some come from the western part of the State. The region around Lake Champlain is quite an apple producing section. In New York great quantities of apples are raised in Orleans, Niagara and Oswego Counties. Michigan raises many apples and Iowa is a great apple producing State, while Illinois and Kansas are heavy producers. Very few Western apples are seen in our markets however as the Eastern crops are more than sufficient.

The May Flower.

Growing in oak and pine woods, from Newfoundland to Kentucky, we find the wax-like, dainty May-flower, holding in itsearly chalice the sweetest fragrance of the spring-time. It is a member of the Heath family, of which there are more than four hundred species, all of which are remarkable for handsome, generally fragrant flowers, of all shades of color, varying from white to pink, red or purple, rarely yellow.

Many of the species are valuable in medicine, and are mostly evergreen, many trailing in shrubby vines on the earth. Most of us know that the Blueberry, Huckleberry, Cranberry, Wintergreen, Laurel, Azalea, Prince's Pine, Indian Pipe and Rhododendron belong to this same order, Ericaceae.

Can we wonder at the delight of the Puritan maiden when she found these earliest darlings of the late New England spring, looking with sad, yet brave eyes, day by day, over the wide waste of water which separated her from childhood's home and girlhood's loving friends, who, even then, were gathering in many a green meadow the primroses, in far off 'merrie England. The one link between her and that dear old home was the white-sailed vessel, which, only a few weeks before, had gaily sped away from these dreary shores, homeward bound; and the little flower, lifting its pearl clusters to catch the sunshine, was named, with the thought in her heart of the May-pole twined with hawthorn buds and cowslips and the merriment about it that she might not see, the May flower, a precious link between the old life of ease so care-free and happy, and the new life of sorrow, toil and hard privations.

Many a glorious spring-time, with singing birds and opening buds, has since dawned upon the earth, and in each of their long, bright, sunny days have fair young girls gone forth into the "dim old woods," in quest of the flowers so dear to girlish hearts, to come home, in twilight may be, with hands filled with those nestlings of the oak and pine, thanking God in their hearts for the coming back again of the wild flowers "in the old familiar places."

Botanists call the flower *Epigaea repens*, or Trailing Arbutus, but we remember the stanch little vessel which brought to these shores the Puritan ancestors, of whom we are so proud, and in our hearts we keep the name, May flower.—*Vick's Magazine*.

Spraying for Orchard Pests.

Mr. D. A. Barker of Genesee County, N. Y., gives his experience in spraying his apple trees with Paris green in the N. Y. Tribune, and seems to think that Prof Cook, who first used Paris green for this purpose, has placed orchardists under lasting obligations. He says:

"Twenty-five to thirty years ago my orchard bore full crops every alternate year of smooth, round apples. I got money then easier and faster, picking and selling the fruit, than at any other time in my life. The trees were large, and I could set a ladder in a good spot and get a barrelful without moving it. But latterly trees have not borne as well, and apples have been knotty and wormy; caterpillars and cankerworms have increased so as to ruin many orchards. The codling moth has been worst of all, and the most difficult to hold in check. But I feel sure now that it is an easy thing to destroy the whole crowd of orchard insects, by spraying the trees with London purple—which is much better than Paris green, and cheaper; it does not settle in water as the green does, and does not need one person to stir it, you drive along with a force pump. Mr. George Allen bought a fruit farm near Holly, N. Y., which was in such a condition that the whole neighborhood ridiculed the purchase. Cankerworms were in the orchard, the trees had not been pruned, and the farm had not paid its way for some time.

"He pulled out half the trees, gave the others a good pruning, sprayed with Paris green once a week for a month, and harvested 1,400 barrels of as fine apples as ever were seen; you could hardly find a wormy one. He expects to have some thousands of barrels this year, as many of the trees been so stripped by cankerworms in '84 that they did not blossom in '85 but seem sure for this season. Mr. Allen plowed and raised beans and some other spring crops between part of the trees, put on what barn manure there was on the farm, but what made the most surprising result was the spraying.

PRICES AND CAUSES.

The prices this year opened at \$1.00@ 25 for Baldwin per lb., and run up to \$1.50 in December but declined again to \$1.25, at which price they now rule. Prices last year opened at about \$1.25 bbl. and advanced to \$2.00, at which price they held until the end of the season. The shipments to England this season have been larger in the aggregate than last season, but the shipments from Boston have fallen off comparatively as compared with last year.

This has been due to several causes. In the first part of the season the growers in Maine held their apples at higher figures than the future of the market either here or abroad would justify the buyers in paying. So that the shipments in the early part of the season were retarded from this port for that reason. The New York growers sold low and the shipments from that port were consequently increased.

The market abroad has not been satisfactory however. The English crop was only fair but the large quantities of American apples offered at prices to rule low and the majority of shippers have no more than balanced their expenses. The English crop was only of fair proportions but the large shipments from this country caused a low range in

prices, on an average about 2@3 shillings less than last season. The Baldwin had an average rate of 10@12 shillings this season against 13@15 shillings last season. Freight ranged about 2@3 shillings last season against 2@3@4 shillings. Insurance has remained about the same, 25@30 on \$1. This insurance is merely against wreckage. Early in the season, that is in the fall and winter, there is almost no loss from decay. The apples are then sound and hard and are shipped as they come from the growers. Later in the season they become unsound and are picked over and rebarreled. Bad storage and the warm air owing to the heat of the engines in the steamers, causes considerable decay in the later part of the season, and this is increased when in rough weather the hatches are closed and the ventilation becomes very poor. The losses by decay on a shipment frequently amount to 10 percent.

THE THINNING AND PRUNING OF APPLES.

The thinning and pruning was just as necessary. If you think you cannot spend time to spray the tree but once, the time then is when the apples are as large as fall-sized peas; then the blossom end of the apple begins up, and the poison gets on the blossom end where it will "do the most good," as the codling moth lays the eggs in the blossoms end and when hatched the larvae eat its way in.

The crop of dried fruits of 1885 was as follows:

Raisins, 50 lb boxes.	\$470,000
French prunes, lbs.	1,400,000
German " "	160,000
Apples, sun-dried " "	1,000,000
Oranges, " "	1,000,000
Pears, " "	100,000
Grapes, " "	800,000
Plums, " "	500,000
Honey, extracted " comb	1,500,000
Bee蜡, " "	750,000
Beeswax, " "	60,000
Wax, bees, sun-dried lbs.	100,000
Figs, lbs.	750,000
Peaches, " peeled.	150,000
Plums, " unpeeled.	118,000
Nectarines, " "	50,000
Walnuts, lbs.	1,350,000
Peanuts, " "	518,000
Almonds, " "	1,065,000

The total value of the crop is estimated at \$8,500,000.

ARKANSAS REPORTS PROSPECTS FOR OVER HALF A CROP OF PEACHES THIS SEASON.

LOUISIANA strawberries are selling in this market at 40@50c per quart basket. Some are also being received from Alabama and Mississippi.

THE eastern papers are denouncing Delos Staples, of West Seneca, Ionia Co., as a fraud because he has managed to get any amount of free notices from them for his "blueberries," which those who were foolish enough to send for found to be nothing but whortleberries. One party says he sent for 500 plants; when received they looked like huckleberry bushes pulled in a swamp—diagnosis probably correct—and that they all died. Our little knowledge of the fellow leads us to think him a slippery genius, who makes a living by gulling the public. This is a free notice also. He asked for one, and we are always pleased to accommodate a man when we can especially if he is deserving.

The Muskmelon.

W. W. Ransom read a paper before the Massachusetts Horticultural Society on "Vegetable Culture," in which he had this to say of the muskmelon:

The muskmelon does best, other conditions being favorable, on recently turned sod. The best way is to turn the land over at the proper time and apply about five cords of manure per acre, broadcast, using a spreader if you have one. After harrowing thoroughly, mark the ground off six feet apart each way. A shovel of manure should be applied to each hill, which should be slightly raised so that the water will not stand around the plants. Seven or eight seeds should be put in a hill, so as to make due allowance for insects. After the fourth leaf is well out and the plants have a good start, they should be thinned to three in a hill. Cultivate both ways thoroughly, as you would a crop of squashes, but never hoe or work around them when the leaves are wet with rain or dew. In picking for market it can easily be told when the ripe fruit is ready, as the under side of the melons will then be lightly streaked with yellow, and they will be in good eating condition by the time they reach the consumer. They are rather an uncertain crop, and are cultivated but very little by market gardeners.

The melons of this class are all yellow-flecked. There are several varieties, but the Arlington Long Yellow is the one raised almost exclusively for market. In shape it is oblong, skin thickly netted, flesh thick and of fine flavor. The Surplice is a variety of quite recent introduction, and of considerable merit for the home garden, but it is not large enough for market. The White Japan is quite a popular sort of most excellent quality. It is of medium size, with pale yellow skin and of golden-colored flesh.

The culture of cantalopes is much the same as that of muskmelons, except that they are usually started under glass and afterwards transplanted, in order to force them along. The Arlington Nutmeg is the leading early variety, and is followed by the Hackensack, which is one of the most popular sorts for the main crop. It is of good size and excellent quality.

The Casaba is a large, late variety, and in the Northern States requires to be started under glass in order to ripen the fruit before frost. The seed is usually started about the first of May, and the plants set out in the field about the tenth of June.

The bed is usually placed near the center

of the field where they are to be grown,

and the seeds started on sods each nine

inches square, so that thirty-two hills are

started under each three by six feet each.

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MICHIGAN FARMER

STATE JOURNAL OF AGRICULTURE.

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The Michigan Farmer

STATE JOURNAL OF AGRICULTURE.

DETROIT, TUESDAY, MAY 4, 1886.

This Paper is entered at the Detroit Post-
office as second class matter.

WHEAT.

The receipts of wheat in this market the past week amounted to 36,105 bu., against 22,042 bu., the previous week and 53,642 bu. for corresponding week in 1885. Shipments for the week were 45,212 bu., against 115,881 the previous week, and 184,510 bu. the corresponding week in 1885. The stocks of wheat now held in this city amount to 1,635,678 bu., against 1,597,992 last week and 957,374 bu. at the corresponding date in 1885. The visible supply of this grain on April 24 was 44,540,660 bu., against 45,808,488 the previous week, and 40,451,148 bu. at corresponding date in 1885. This shows a decrease from the amount reported the previous week of 1,268,638 bu. The export clearances for Europe for the week ending April 24 were 718,001 bu., against 1,329,028 the previous week, and for the last eight weeks they were 5,362,017 bu. against 4,325,157 for the corresponding eight weeks in 1885.

The past week has been fairly active in a speculative way in this market, but sales of spot have been very moderate. Fluctuations have been within narrow limits, and the week closed with values rather lower than the previous Saturday. Yesterday this market opened strong and a little higher than at the close of the week, but gradually fell away until at the close there was a net loss of 1/4¢ from Saturday's figures on both spot and futures. Chicago also weakened during the day, and closed lower than on Saturday. The New York market opened firm on war rumors from Europe, but dealers must have concluded that Greece was not big enough to make much trouble even if she did fight, for the market fell off before the close, the last sales being lower than Saturday's figures. Liverpool was firm with a fair demand, and London was firmer.

The following table exhibits the daily closing prices of spot wheat from April 15th to May 3rd.

	No. 1 white	No. 2 white	No. 3 red	No. 3 white
May 15	84¢	84¢	84¢	84¢
16	83 1/2	83 1/2	83 1/2	83 1/2
17	83 1/2	83 1/2	83 1/2	83 1/2
18	83 1/2	83 1/2	83 1/2	83 1/2
19	83 1/2	83 1/2	83 1/2	83 1/2
20	83 1/2	83 1/2	83 1/2	83 1/2
21	83 1/2	83 1/2	83 1/2	83 1/2
22	83 1/2	83 1/2	83 1/2	83 1/2
23	83 1/2	83 1/2	83 1/2	83 1/2
24	83 1/2	83 1/2	83 1/2	83 1/2
25	83 1/2	83 1/2	83 1/2	83 1/2
26	83 1/2	83 1/2	83 1/2	83 1/2
27	83 1/2	83 1/2	83 1/2	83 1/2
28	83 1/2	83 1/2	83 1/2	83 1/2
29	83 1/2	83 1/2	83 1/2	83 1/2
30	83 1/2	83 1/2	83 1/2	83 1/2
31	83 1/2	83 1/2	83 1/2	83 1/2
May 1	83 1/2	83 1/2	83 1/2	83 1/2
2	83 1/2	83 1/2	83 1/2	83 1/2
3	83 1/2	83 1/2	83 1/2	83 1/2
4	83 1/2	83 1/2	83 1/2	83 1/2
5	83 1/2	83 1/2	83 1/2	83 1/2
6	83 1/2	83 1/2	83 1/2	83 1/2
7	83 1/2	83 1/2	83 1/2	83 1/2
8	83 1/2	83 1/2	83 1/2	83 1/2
9	83 1/2	83 1/2	83 1/2	83 1/2
10	83 1/2	83 1/2	83 1/2	83 1/2
11	83 1/2	83 1/2	83 1/2	83 1/2
12	83 1/2	83 1/2	83 1/2	83 1/2
13	83 1/2	83 1/2	83 1/2	83 1/2
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28	83 1/2	83 1/2	83 1/2	83 1/2
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May 1	83 1/2	83 1/2	83 1/2	83 1/2
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3	83 1/2	83 1/2	83 1/2	83 1/2
4	83 1/2	83 1/2	83 1/2	83 1/2
5	83 1/2	83 1/2	83 1/2	83 1/2
6	83 1/2	83 1/2	83 1/2	83 1/2
7	83 1/2	83 1/2	83 1/2	83 1/2
8	83 1/2	83 1/2	83 1/2	83 1/2
9	83 1/2	83 1/2	83 1/2	83 1/2
10	83 1/2	83 1/2	83 1/2	83 1/2
11	83 1/2	83 1/2	83 1/2	83 1/2
12	83 1/2	83 1/2	83 1/2	83 1/2
13	83 1/2	83 1/2	83 1/2	83 1/2
14	83 1/2	83 1/2	83 1/2	83 1/2
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11	83 1/2	83 1/2	83 1/2	83 1/2
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4	83 1/2	83 1/2	83 1/2	83 1/2
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7	83 1/2	83 1/2	83 1/2	83 1/2
8	83 1/2	83 1/2	83 1/2	83 1/2
9</				

Poetry.

NEVER SATISFIED.

A little with content, is meets
To him who'll not refuse it;
Who takes it as the Lord has sent
And then does rightly use it.
Most men; with nothing, have a thought
That life would be a pleasure.
If they could share, in smallest part,
With those who have the treasure.
But is this true? Experience shows
That, in this world of sorrow,
The man who fights for bread-to-day
Will fight for pie-to-morrow.
He who he does not want the earth;
His thoughts are far above it;
The gold of India and of Or;
His simple tastes don't covet.
A very little meets his wants;
Enough to furnish living.
He says is all a man should ask,
And thank the Lord for giving.
But is it true? Well, if it be,
The truth you'll have to borrow.
The man who fights for bread-to-day
Will fight for pie-to-morrow.

Cincinnati Commercial-Traveller.

A MEMORY.

An old-world country garden, where the hours
Like winged sunbeams flash in glory by,
And where the scent of strange, old-fashioned
flowers
Brings back a tender bygone memory.
The walks are straight, and patterned with white
stone,
And pacing there with reverential tread,
I dream once more I hold within my own
The soft warm fingers of the child who's dead.
The child whose dainty feet trod with mine,
As we two chased the golden butterflies—
The child who reviled in the bright sunshine,
And shamed her gladness in her laughing eyes!
We used to linger in the long soft grass,
And when a sun-ray kissed her dimpled hand,
We told each other 'twas a fairy pass
To read the secrets of our Fairyland;
And, holding safely in her radiant face
That happy sparkle, we would run to peep
If dewdrops trembled in the self-same place,
Or last night's bud had blossomed in its sleep.
I thrashed her in my arms while tired of play,
And whispered love names in the baby ears;
She made the glory of the summer's day;
My wee liege lady of but five short years!
And now? Small wonder that the roses lie
In pink fragrance by the daisies' side,
For sunshine vanished with her last soft sigh,
And skies are grayer since our darling died.

—Chambers' Journal.

Miscellaneous.

JOHN'S STORY.

"Well, would you like to hear my adventure in New Orleans?" John Bright leaned his elbow on the arm of the red plush chair in which he sat, with a thoughtful look in his dark-blue eyes.

"Why, yes, of course."

"By all means." Eugene Carton and his sister looked eagerly at the handsome blonde in front of them.

They had been talking about the New Orleans Exposition, which all had visited the winter before, and naturally their conversation had drifted into personal reminiscences and criticisms on the ways and manners of the people of that beautiful southern city.

"Did you really have an adventure?" asked Nell, eying him questioningly from under her long dark lashes. They had intended to meet in the Crescent City, but through some misunderstanding the Cartons had missed him. Nell had always felt a little aggrieved over this, just as if John had really been to blame in the matter, and all allusion to their sojourn in the south brought back that vague feeling of disappointment which had mingled itself with all her enjoyments while there.

Not that she cared anything for John Bright. Oh, no; not even to herself did she ever admit that. But then he was Eugene's most intimate friend, and he was such a bright, companionable fellow, how could she help liking him little—"just for Eugene's sake, you know." She sincerely believed that it was her love for her brother that made her so solicitous always for his friend's comfort and so anxious to make him always feel at home and thoroughly welcome in her father's house.

And if women will deceive themselves so ingeniously in these little matters, no one can blame them. The reality seems all the prettier when they surpass themselves into the admiration, one day, that brotherly love is not such a powerful motor after all.

"Well, go on with your story," said Eugene, lighting a cigarette, with his sister's permission, and puffing away expectantly. "I'll be getting drowsy, presently, if you don't wake me up with your thrilling episode."

"Well—John twirled his blonde mustache reflectively, ignoring the last remark—"I was walking down Canal Street one afternoon, when it began to rain—"

"Remarkable! when it was in the rainy season," interrupted Eugene, who seemed determined not to be led into thinking his friend had met with any extraordinary adventure.

"Eugene, do hush!" Nell said, imploringly; but John did not seem to mind his friend's quizzing in the least.

"As I said, I was walking down Canal Street, when it began to rain, not violently, but enough to make a man feel uncomfortable, and the feathers on a woman's bonnet limp. Fortunately I had an umbrella, which, of course, I immediately raised. Just as I did so, a young lady came out of one of the large drygoods stores behind me. She stood irresolute for a moment, as though nonplussed by the rain, yet an evident anxiety possessed her to reach the car."

"Instantly I found myself in a strange dilemma. What should I do? There was a young lady, delicate and beautiful, richly attired in garments which the rain would certainly damage, without a

slightest protection from the elements; while I, not three feet distant, was possessed of an umbrella ample large enough to shelter two. It seemed like a piece of impertinence, yet on the impulse of the moment I mustered all my gallantry, and, stepping forward, offered to escort her to the car."

"To my surprise, and I must say pleasure, she accepted gratefully, and we walked to the next corner to meet the car. I noted then the extreme loveliness of her beauty, which was of the pure Creole type, and the marvelous finish of her toilet, which showed in its richness of coloring the southern taste. I could not censure her for her heatlessness in exposing herself to the disastrous effects of the rain."

At this juncture Nell, curled up on one end of the sofa with her Kensington in her lap, looked very grave. She could not quite approve of handsome blonde strangers offering umbrellas to unknown ladies. It might have been the "extreme loveliness" of the Creole belle which made the offense so heinous in her eyes, but she would have been shocked had you suggested such a thing.

"When we reached the corner there was no car," John continued. "Being in 'Mardi-gras' time, there was always more or less delay. When the car did arrive, it was so crowded there was not a foothold. The next and the next proved to be the same. Unconsciously we walked on, the young lady by an almost imperceptible guidance directing our footsteps. We walked along the Rue Royal quite into the heart of the old French town, the young lady scarcely seeming aware of the fact that we had traversed so many blocks. I was too delighted with her bright conversation and *naiveté* to wish to undecieve her, and so we walked along until she stopped suddenly in front of one of those gloomy French houses, so dreary in exterior appearance, but often beautiful and gay within. A high wall surrounded the dwelling, surmounted by nails driven in so that the points projecting upward, a sure safeguard against marauders. As usual, a high balcony graced the front of the house. From the gate—a massive iron-barred one—a stone paved led up to the old-fashioned door.

"I looked at my watch. A flush of shame crept over me. It was past ten o'clock. I felt that I had infringed on the hospitality extended to me. I began to apologize, but Monsieur de Chartre stopped me.

"My dear sir," he said, cordially, "you cannot go out in such a storm. I will not permit it. My home is large. We have ample accommodations. Remain with us to-night."

I hesitated a moment; the rain beating on the window-pane seemed dismal enough. Besides, I was in a part of the city with which I was unfamiliar. I might lose my way and wander about those narrow streets for hours; and then blood-curdling tales came back to me of strangers who had been robbed and murdered in those dark thoroughfares. I had a valuable watch and chain and quite a sum of money about me, which I would not care to lose. I confess the idea of venturing out into that pitiless storm, in the heart of the high-walled, mysterious French town, unprotected by a weapon of any sort, rather dismayed me. Yet I remembered that I had made arrangements to leave the city in the morning, and my train left at six; and I intimated as much to Monsieur de Chartre.

"I feel very grateful," she said, lifting her big eyes to mine with a shadow of timidity in their depths which made them all the lovelier; and she hesitated a little, "I know my father would wish to thank you also, if—if—

"If you only knew whom to thank," I said, politely. "I will leave word with one of the servants to unlock the door and gate at five. You can rise then, and leave the house at your pleasure. If you desire a cup of coffee, Jacques will have it ready for you."

"I thanked him sincerely. I could not feel grateful enough for such a warm and cordial hospitality. It is true indeed that these Southerners have the kindest and most hospitable hearts in the world. An old and valued friend of the family could scarcely have been treated more kindly than I, a complete stranger, save for the slight stamp of genuineness which 'Tremaine & Leeman' gave me in this most elegant and beautiful home, every part of which betokened the wealth and position of the owner.

A few moments later Jacques came to show me to my room. With a lingering glance, I bade the young lady good-night. It seemed to me that her beautiful eyes were filled with a shadow of regret for our brief acquaintance. Her father followed me to the court without, giving me several messages for Mr. Tremaine and other friends in Detroit, all of which I promised to carry faithfully. Then, with a courtly good-night, he intrusted me to the care of the waiting African attendant.

My apartment was handsomely furnished, in keeping with the rest of the house. It was apparently a back room connecting with one in the front of the house by heavy folding-doors, across which a rich crimson *portière* fell.

Jacques brought me a pitcher of fresh water and some clean towels, and then mumbled something in his unintelligible Creole French, bowed himself out.

I examined the room carefully, locking all the doors except the folding one, which I found fastened on the other side, and went to sleep thinking what a capital joke this was on Smith, who was undoubtedly reposing beautifully in No. 105, at the St. Charles, unconscious of the strange escape I had gotten him into.

I resolved to write to the young lady as soon as I left the city, informing her of my little deception, and introducing the original Smith, whom I was quite sure would fall head over ears in love with her at sight. Poor Smith, I was just mopping out his future most beautifully, when Morpheus seized me and carried me off into dreamland.

About midnight I was awakened by a slight noise in the room. I listened, but all was as still as death. Apparently the whole household had fallen into slumber. I attributed the sound to my own imagination, and was about to compose myself to slumber, when a cold chill crept over me. I was sensible of a near presece. The room was intensely dark, and I could see nothing. Neither could my faculties, which were now thoroughly acute, perceive the slightest movement or sound.

Yet, my blood ran cold with the premonition of evil. I could a cold sweat breaking out all over me—the chill crept to the very roots of my hair.

"Oh, you horrible wretch!" cried Nell, when she had recovered her breath; "and so it was all a dream?"

"Yes," answered John, coldly. "I awoke in No. 105, at the St. Charles, with Smith asking me if I mistook him for a brick wall or a lamp-post, that I was bounding him so vigorously."

Nell did not seem to care much for the sell so long as the beautiful Creole had proved a myth. The story had awakened her consciousness a little, and she seemed a little shyer of John for several days afterwards. But I am happy to say that she was a sensible girl, and when John asked her if she only loved him for "Eugene's sake," she answered candidly, "No." Thus came the sequel to "John's Story." —Frank Leslie.

The Red Snow Alga.

At first the alga of red snow was looked upon as the sole inhabitant of the ice lands of the polar regions, says Chambers' Journal. But in 1870 Dr. Berggren, botanist of Nordenskjöld's expedition, discovered a second or reddish-brown alga.

It is allied to the "snow blossom," but has this peculiarity, that it is never found on snow, but combined with the kelp, which greatly adds to their beauty. Besides growing on the surface of the ice, it is also found in the holes one or two feet deep, and three or four feet across, in some parts so numerous and close together that there was scarcely standing room between them. A

smoke, in which I declined to join him. "The rain, which had been mild at first, now turned into a raging torrent. It beat savagely against the windows, and the wind swept mournfully through the court. Now and then it crept under the doors, and into the room, bringing a faint scent of the orange-blossoms that were being swept from their stems on the bending trees without. But the inclemency of the weather outside only made the comfort and brightness of the apartment seem more perfect.

"With such a charming hostess the moments sped swiftly. I became more and more enthralled with her dark eyes and her gracious manner, so typical of the grace which has made the Creole women celebrated. Besides, the novelty of the situation made it seem tenfold more attractive. I began to tremble vaguely for human for a man to resist the fascination of this lovely Creole. I don't know to what length I might have committed myself, had not the door opened and Monsieur de Chartre once more appeared upon the scene. As it was, I think he surprised me saying some foolishly tender things to his daughter.

"I looked at my watch. A flush of shame crept over me. It was past ten o'clock. I felt that I had infringed on the hospitality extended to me. I began to apologize, but Monsieur de Chartre stopped me.

"For a second I stood there as if frozen to the spot, my senses reeling, my hands clinched in a sudden agony of mortal terror; then like a flash of lightning the truth swept over me. A terrible crime had been committed. The responsibility was to be laid on me. In the morning the police would come to arrest me. What vestige of power would I have to disprove it?

"With a sudden, quick energy, born of desperation, I went to my room and dressed myself, leaving not the slightest trace of my presence there. Assuring myself that not a card or a slip of paper was left as a clew to my identity, I took my boots in my hand and crept noiselessly down the stairway.

"When I reached the door beyond the court, I shrank back in dismay. I had forgotten it would be locked and barred. I entered the apartment where I had been entertained the night before, hoping to find a window unbolted. To my surprise I heard voices and perceived a light emanating from the room adjoining. The door was slightly ajar. I walked breathlessly across the room and peeped through the crevice.

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A SOUTHERN GIRL.

Her dimpled cheeks are pale;
She's a lily of the vale,
Not a rose.
In a muslin or a lawn
She's fairer than the dawn
To her beans.

Her boots are skin and neat—
She is vain about her feet,
It is said.
She amputates her r's,
But her eyes are like the stars
Overhead.

On a balcony at night
With a cloudy cloud of white
Round her hair—
Her grace, who could paint?
She'd would fascinate a saint,
I declare.

'Tis a matter of regret,
She's a bit of a coquette
When I sing;
On her cruel path she goes
With a half dozen beans
To her string.

But let that all pass by,
And her maiden moments fly
Dew unpealed;
When she marries, on my life,
She will make the dearest wife
In the world.

—Samuel Minton Peck.

Inventive Cranks.

"Do I run across many cranks?" said a well known patent lawyer in answer to a reporter's question. "Well, young man all cranks are not inventors, and possibly all inventors are not cranks, but a good many of them are badly hit. Now, there is a German who lives on the south side, one of the most intelligent men I ever met, with no crankiness about him except in one thing. He wants to patent a process for making gold. For over a year he has been dropping into my office and trying to get me to get his papers for him. All right, I'll say, 'explain to me your process and I'll make out your application.'

"Oh, no," he says, "no one shall ever know that but myself. They will never know that in a Patent Office even." And he didn't go away. I have asked him why he didn't make some gold himself. 'Oh, no,' he always replies; 'the secret is too valuable. I dare not until I get it protected,' and that is all he will tell me. One of the great peculiarities of inventors is their suspicious nature. Whether I look like a rascal or not I can't say positively, but about half the people who come to me seem to think that I am. They seem to carry the idea that I sit up here like a spider in a web, just waiting to steal some one's idea and patent it.

"About a week ago a tall, thin-faced young man craned his neck in through the door, and looked all around the room to see if I was alone. Then he walked over, looked under the drawing table and behind the safe, and tried the door to the next room. He was evidently satisfied that everything was safe, for he came up to me and almost whispered:

"I've got something that will make \$10,000 a month."

"You have?" said I.

"Yes. Do you want to take an interest in it?"

"No," said I; "never invest in patents, but if you have a good thing you'll have trouble in getting capital. What have you got?"

"Again he looked furtively around the room and then pulled out an envelope. Along the crease where the flap turns over he had pasted a string, the ends of which stuck out about an eighth of an inch after the envelope was sealed. The purpose was to take hold of one end of the string when you wanted to open a letter, and by pulling it, open the envelope in the same way that it would be opened by a knife. The scheme is as old as the Patent Office, and in one year there were 135 applications for a patent on the same thing.

"My friend," said I, "do you really think there is \$10,000 a month in this?"

"Oh, yes," he said. "I have figured it out, and it will only cost \$50 a month to make and sell \$10,000 worth."

"But," said I, "do you know that there are at least 1,600 models of this same plan in the Patent Office now?"

"It's a — lie," said he, getting excited, "and let me tell you, mister, I'm out on your little game. I didn't have much confidence in you when I came in here, but I've got less now. I'll telegraph to the Commissioner of Patents before an hour, an' just shut off your getting out any patent on this. That's what I'll do, and out he went, and I have seen nothing of him since. A good many of them will bring models here which won't work, because they don't want to show the whole plant. They want a patent, but want to keep their process secret."

—

National Honor.

We do not like to criticise American women and indeed it is very seldom that occasion for such criticism offers, says the Pittsburgh-Chronicle Telegraph.

Sometimes, though, it becomes necessary, and one of these times is the present. The country was not long ago informed that Queen Victoria had granted a special audience to Mrs. Phelps, wife of the American minister, at the Court of St. James.

Later the two ladies breakfasted together,

and in a friendly way discussed gastronomy in general, and English and American gastronomy in particular.

The discussion finally narrowed down to an interchange of views on jams and preserves,

and right here is where we find it necessary to criticise Mrs. Phelps. She is the wife of the American minister, and as such is bound to uphold at all hazards

at any cost the dignity of stars and stripes.

But did she do it? Alas!

We fear not, if reports are true. It is said that Mrs. Phelps actually conceded to Queen Victoria that English jam is superior to the American product. Now friends and fellow citizens, is such a surrender what this republic has a right to expect at the hands of its minister's wife? Is the nation to calmly submit to such treatment? Is this the way in which Jeffersonian simplicity is to be exemplified abroad? If these concessions on the part of Mrs. Phelps are to continue, she will soon admit that the baked beans of Boston are excelled by some effects English dish, or that American roast turkey with cranberry sauce is no match for English roast beef, and she may even go so far as to deny that pumpkin pie is the great bulwark of American independence. But we hope that she will not proceed to the last extreme. Let her be warned in time. We are incensed about the jam, but let her beware of the vengeance of an infuriated nation if she says again that English jam is inferior.

"Well, sir, you can have my ears if that infernal idiot didn't walk up and rest his elbow on the stump, and he was there when she exploded. He took a rise of six or eight feet, came down spread eagle fashion, and then scrambled up and made for his wagon with olives sticking out all over him. When he went by the house my wife asked him if the machine saved ten per cent. in soap, but he never answered nor came to a halt. He just sailed over the forewheel to his seat on the wagon, give the horses a cut with

the whip, and was a mile away when I went out to the road to inquire if his machine was full jeweled."

Honesty Rewarded.

A very small newsboy stood at the corner of Superior and Clark streets, Chicago. Under his arm was a solitary and beat-up copy of the noon edition of the Daily News. Satisfaction either by the pictorial condition of his pocket, caused by a successful run of business, or by the warmth of the sun, he disdained to call his wares.

A round and austere officer of the North Side Street Railway Company passed. He stopped abruptly, approached the lounging youngster and said: "News, boy," at the same time slipping a coin into the hand of the urchin, who in turn dexterously deposited it between his teeth. Delivering the wrinkled paper the boy sent a dirty hand into his trouser's pocket and produced four pennies and a nickel, which he emptied into the extended palm of the dignified purchaser.

"You should have more care, sir," said the round gentleman, glancing at the change and then handing it back to the youngster. "I gave you a three-cent piece, not a dime."

Not a muscle of the boy's face moved. Prof. Hugo Magnus recently delivered in Berlin a lecture on "The Speech of the Eyes." First he showed how various thoughts and emotions may find their expression through the eyes, how rage, joy, sadness, sympathy, all may be indicated by one look, and how a question may be asked or replied to simply by a scarcely observable movement of the eye. But the most interesting part of his lecture was a point with which many a physician may not be acquainted, not from ignorance, but simply because he has never given the subject any thought, viz: The fact that all the various expressions of which the eye is capable are not at all made by the eye itself, i.e., by the eyeball, but by the movement of neighboring parts. The eye itself may be stationary, not the least motion may be observed in it, and yet the rising of the lids expresses our surprise, half-closing them together with contraction of the brow indicates our displeasures, and a peculiar abillar-like movement of the lids, the orbicularis palpebrorum, and the parts around the nose together form what we are in the habit of calling "a merry twinkle."

Many a one who will read these lines will at once acknowledge that such is the case, and that the facts are as stated; but at the same time he will acknowledge that he had never thought about it, and had never imagined that in all the manifold expressions which we ascribe to the eye—the mirror of the soul—the eye itself has no share. When a criminal has his character pictured in his eyes, it is not that they tell us the moral depravity of the man, but the play of the neighboring muscles, which, perhaps for years, always obeying the impulse of the brain, form together the group we call physiognomy.

The nutmeg upon the tree is about as large as a peach and is a more regular globe, has a light yellow exterior, covering a paler stratum, which is a half inch or more deep, a tough pulp. It opens when the fruit is ready to leave the tree. The combination of colors in this little globe is then striking. Inside of the outside a polished, glossy, leather colored nut is a basis for the loveliest branching, bright red embroidery, an enclosure which lies close around the shining kernel. I have no words to tell how pretty this fruit is, in its peeling crevice in the fresh-cleaved delicate, corn-colored case. The red branchlet, this close envelop, is the "mace" of commerce and of pudding, custards, and cake. In drying it loses its glow of color. The brown nut, so daintily enveloped with red embroidery and then enclosed in a soft-tinted, yellow globe, this brown, shining nut when freshly cut, has a very clean, nutmeggy smell.

When Ceylon not long ago sent by slow ships her first nutmegs to the London market the consignees wrote back to the planters: "Grow more mace and less nutmeg, because mace gets the better price."

The Speech of the Eyes.

Mr. Hugo Magnus recently delivered in Berlin a lecture on "The Speech of the Eyes." First he showed how various thoughts and emotions may find their expression through the eyes, how rage, joy, sadness, sympathy, all may be indicated by one look, and how a question may be asked or replied to simply by a scarcely

observable movement of the eye. But the most interesting part of his lecture was a point with which many a physician may not be acquainted, not from ignorance, but simply because he has never given the subject any thought, viz: The fact that all the various expressions of which the eye is capable are not at all made by the eye itself, i.e., by the eyeball, but by the movement of neighboring parts. The eye itself may be stationary, not the least motion may be observed in it, and yet the rising of the lids expresses our surprise, half-closing them together with contraction of the brow indicates our displeasures, and a peculiar abillar-like movement of the lids, the orbicularis palpebrorum, and the parts around the nose together form what we are in the habit of calling "a merry twinkle."

Many a one who will read these lines will at once acknowledge that such is the case, and that the facts are as stated; but at the same time he will acknowledge that he had never thought about it, and had never imagined that in all the manifold expressions which we ascribe to the eye—the mirror of the soul—the eye itself has no share. When a criminal has his character pictured in his eyes, it is not that they tell us the moral depravity of the man, but the play of the neighboring muscles, which, perhaps for years, always obeying the impulse of the brain, form together the group we call physiognomy.

—

Brahmin Cattle.

The Colfax County Stockmen seems to be as much of a humorous paper as a stock journal. About Brahmin cattle it has the following to say:

The peculiar characteristic of this class of cattle is that they are good saddle animals; and it is given out cold and flat that they can go at a six-mile an hour gait for sixteen hours a day for two weeks at a stretch and keep fat. Besides its speed

it is said to produce a better article of meat and more of it than any other breed of cattle, and with all its other good qualities it has the happy faculty of being able to subsist on barren ground in a waterless region. This, then, is the animal that New Mexico has been looking after. What this country most wants is a class of natural saddle animals that have the will and endurance to carry the average cowboy so far away in the day that he will not feel like returning home to sleep; one that will give milk by the way, go without food and water, and keep fat all the time. The cattle now bred on these ranges possess these qualities in severity but not collectively. The Texas is a good traveler, but does not take kindly to the saddle; the Hereford is a good saddle animal, but is a poor traveler; the Shorthorn has been known to go without food, but requires water, while the cowboys have no particular use for water but cannot stand very much of a drought. 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(Continued from first page)

that would not only be absolutely practical for all ordinary fencing purposes, but also combine the elements of strength, symmetry, saving of labor, protection to crops, perfectly available for stock purposes, for the farmer and ranchman, and proof against rabbits and poultry, for nurserymen, gardeners, and vine growers, and, above all, a fence that could be made at a cost that would bring it within the reach of all. The absolute perfection has been attained by the Henley's Improved Monarch Fence Machine, which is now, with the valuable improvements recently made on it, a perfect fence machine, making a fence embracing all the essential elements of success and the desirable qualities named above. Mr. Henley has just issued an elegant 48-page catalogue, giving full information as to the Improved Monarch Fence Machine, and we would advise all parties interested in the subject, or who contemplate purchasing a fence machine, to send for one of these catalogues. Address, M. C. Henley, 533 to 533 North Sixteenth St., Richmond, Indiana.

Shrinkage in Cattle.BEDFORD, Mich., April 29th, 1886.
To the Editor of the Michigan Farmer.

Will you please give the estimated shrinkage of the common run of cattle from 1,000 to 1,500 lbs. weight, shipped from 45 to 50 miles by rail, and oblige

SUBSCRIBER.

No real estimate of the shrinkage in cattle can be formed that will not vary under certain conditions. If cattle are sold twelve hours off feed and water, and the bargain is lived up to the shrinkage will be light, not running over 10 pounds per head; but if we have seen a shrinkage of 50 pounds and in a few instances on heavy cattle it has run over 100 pounds. Grass cattle will shrink more than those fed on grain. It is an established fact that cattle never weigh as heavy again as when they leave the farm. Take cattle that are raised say 50 miles from Detroit. There is a shrinkage on them here, another at Buffalo, and if they go to New York, still another. The amount will vary according to the condition in which they were purchased from the farmer, and no two car-loads will show the same shrinkage.

Culture of the Potato.

The Early Rose, for a considerable period, was the favorite in this region; but it is now mainly superseded by quite a number of more recent varieties, the most popular of which it would be difficult to determine. Among these, I will name Burbank, White Elephant, Peerless and Late Rose, which are esteemed about in the order named.

We regard a sandy loam, with porous, well-drained subsoil, as preferable for the potato. A vigorous shoot, from a single eye, is preferable to a greater number, but the habit of different varieties seem to vary considerably in this particular. Whole tubers of certain varieties will rarely push from more than a single eye; while others will generally send up several shoots, which as a matter of course, are likely to be comparatively less vigorous. Single shoots will, in most cases, set fewer tubers, which will generally develop more evenly, hence of average, even size. With several shoots, one or more will, in general, take the lead in vigor, resulting in unevenly developed tubers. Such being the case, my preference is to cut to a single eye, preferring those near the crown; and planting from one to three eyes in a hill, in check rows, about three feet apart each way, admitting of cross cultivation.

The potato is most nearly in its natural condition when left where it grew, until needed for use. This being the case, when dug, I would have it exposed to the air only long enough to thoroughly dry the surface, and then, as soon as practicable, remove it to cool, dark quarters.

Probably few localities excel Northern Michigan in the production of sound, healthy potatoes. Here, the ground is never frozen, the earth being covered with snow before freezing, and vegetation starting even prior to its disappearance in spring. It is a very common practice here to leave the crop in the hill till spring, when not needed sooner for actual use. The potato evinces its satisfaction under this treatment by becoming a weed, very difficult of eradication; since every minute tuber remaining in the soil is sure to become the parent of a more or less numerous progeny. Under this state of things, the shiftless farmer, when he has suffered the proper season to pass without having planted, resorts to his last year's "patch," and ekes out his supply with the second crop, known as "volunteers." —T. Lyon, in Rural New Yorker.

When hard-finished walls have been kaledomed the soiled coats should be washed or scraped off before a new one is put on. This is the most disagreeable part of the process. The furniture should be covered, as the lime makes spots that are removed with difficulty, especially upon black walnut.

A LADY says, in the Domestic Monthly, that the best thing she ever tried for cleaning carpets was bran. She moistens it slightly, only just enough to hold the particles together, sprinkles it evenly over the floor and sweeps as usual. It cleans the carpet nicely, and every particle of dust is gathered up with the bran. Carpets swept in this way retain very little dust, as is proved by shaking them.

Veterinary Department

Conducted by Prof. Robert Jennings, late o Philadelphia, Pa., author of "The Horse and Diseases," "Gout and their Diseases," "Sore Horses," etc. Professional advice through the columns of this journal to regular subscribers free. Parties desiring information will be requested to state their full name and address, the subject of inquiry, and the name of the animal. A fee of one dollar will be charged for each question, and payment will be required in advance, unless otherwise specified, as another horse, fitting it may appear to examine the nostrils, lining membrane of the eyes, etc., note their appearance, the redness, swelling, etc., of the mucous membranes, the condition of the nose, eyes, or mouth; or any other symptom may be observed. In cases of lameness, the foot, forefoot, or hindfoot, forward, backward, swaying sensitive to the touch or otherwise, soft or hard. These symptoms, when properly given, assist in the diagnosis of disease, and often furnish a strong clue to the cause. The symptoms should be accurately described, how standing, together with color and age of animal, and what treatment, if any, has been given. Friends address, 301 First Street, Detroit.

Heavy Winter Feeding, Little Exercise—Purging Horses.CLINTON County, April 26, 1886.
Veterinary Editor Michigan Farmer.

Will you please give the estimated shrinkage of the common run of cattle from 1,000 to 1,500 lbs. weight, shipped from 45 to 50 miles by rail, and oblige

SUBSCRIBER.

I have two mares, weight about twelve hundred lbs., seven years old this spring. They don't seem to be very healthy. As soon as I commence to work them they are puff like an over-heated ox. They are in good condition, eat hay but hardly open; they hold their noses wide open; sweat quick; they have not been overdriven; haven't got the heaves nor are they wind-broken. It is the worst in the spring; and gets worse every spring. If you will prescribe treatment you will greatly oblige a subscriber.

I also have a mare 17 years old, weighs one thousand pounds. She rubs her tail; hide tight on her, hair dead color; her appetite not very good. I fed her corn-stalks and oats. I gave her Socotrine oats, pulv., and Jamaica ginger root. She is in a little better condition than when she was before, but she keeps on rubbing her tail. If you will answer this you will greatly oblige. Then I would like to know a remedy to physic a horse right.

AN OLD READER.

Answer.—The cause of periodic trouble with your mares, we cannot, from your description, determine. Too heavy feeding, particularly with hay, little exercise, a heavy winter-coat, with quick or hard work in the early spring, may explain it. Your 17 years old mare is probably troubled with worms. The best remedy known to us is strichnia. As the remedy requires caution in preparing it, we never prescribe it, but will mail it properly prepared for use, on receipt of \$1. A good remedy is oil of male fern, one and a half ounces; linseed meal, half an ounce; mix with molasses and divide into two balls; give one two nights in succession. Repeat in one week. Purgatives, improperly used, do injury. If you send us a description of symptoms in the animal you wish to purge, we will advise you. The indiscriminate use of purgatives is frequently very harmful.

Oedema and Lameness in a Mare.OILWELL, April 23, 1886.
Veterinary Editor Michigan Farmer.

I have a mare weighing about 1,600 lbs. with foal. She is swollen from under along under belly, and between forward legs and up on breast. Legs stock a little, but not very bad. By pressing on the swollen parts with the hand it leaves a dent she is also lame in the foreleg. The Veterinary bairn thinks it is in the shoulder. In walking she takes a shorter step with it than with the other; when resting sometimes it is thrown directly in front, then again she will rest it on the toe. If the road is hard she limps scarcely any, but if the road is soft and full of holes she is very lame. If she steps in a hole or so that it will go lower than the other leg, she will go on three legs for two or three steps, then will walk on as usual again. Now if you can help her I shall be much obliged.

A SUBSCRIBER.

Answer.—The swelling "under belly and between forelegs" in your mare is Oedema, or serious effusion in the cellular membrane. Treatment: Give the following: Sulphate of iron, pulv., 1 oz.; gentian root, pulv., 3 oz.; Jamaica ginger root, pulv., oil turpentine, of each 2 drachms; simple syrup sufficient to form a mass. Divide into 12 pills; give one or three times a day. Give nourishing food, and moderate exercise. The lameness we cannot locate from your description. Your veterinary surgeon, if an experienced practitioner, should make no mistake in shoulder lameness.

Grub in Sheep.LAKEHURST, April 23, 1886.
Veterinary Editor Michigan Farmer.

Can you tell me what to do for the grub in the head of sheep? I lost one the other day, and opened the head and found as many as 20 grubs, some an inch long and some smaller. If there is any help for it please inform me through the FARMER.

G. H.

Answer.—The remedy for grub is prevention. We know of no cure, or means of dislodging the grub when once settled in the frontal sinuses of the sheep. Many suggestions have been made from time to time, but all proven failures. A popular prevention is to smear the nostril of each sheep during the season the *astrus ovis*, or gad fly is present, always indicated by the unusual excitement and alarm manifested by the sheep, which collect in groups with their heads inward and their noses close to the ground, and into any loose dirt if within their reach, which affords them temporary relief from an attack of their common enemy.

COMMERCIAL

DETROIT WHOLESALE MARKET.

DETROIT, April 4, 1886.

Wheat.—Market quiet; Minnesota patents are lower, as are also bakers' brands. The dullness in wheat of course causes a weak feeling in flour at present low values. Quotations yesterday were as follows:

Michigan white wheat, process price \$0.50 to \$0.55
Michigan white wheat, roller process 4¢ 00 to 4¢ 05
Michigan white wheat, patents..... 4¢ 05 to 4¢ 10
Minnesota, bakers'..... 4¢ 05 to 4¢ 10
Low grade winter wheat..... 3¢ 85 to 4¢ 00

Wheat.—The wheat market opened steady yesterday under favorable reports from other points and the belligerent attitude of Greece, but gradually settled down to its usual condition of dullness, and values declined 1¢ 00 to 1¢ 05 on spot and futures at

the close were as follows: Spot—No. 1 white, 5¢; No. 2 red, 5¢ 50; No. 3 red, 5¢ 50; Futures—No. 1 white, May, 5¢; No. 2 red, May, 5¢ 50; June, 5¢ 50; July, 5¢ 75; August, 5¢ 75.

Corn.—Weak and lower; No. 2 at 37¢ 50; high mixed, 38¢ 50; new mixed, 38¢ 50; rejected, 38¢ 50. Market dull at the close.

Oil.—No. 2 white are selling at 35¢ 50, No. 2 mixed, 35¢ 50, and light mixed at 34¢ 50 per bushel. Market steady.

Barley.—Steady at \$1 45¢ 50 per cental for No. 2, and samples quoted at \$1 30¢ 50.

Rye.—Market lower at 55¢ per bu. for No. 2.

Feed.—Bran is quoted at \$1 00 per 100 lbs. and middlings at \$1 00 per 100 lbs. Market weak.

Butter.—Steady at a lower range of prices. Choice dairy would bring 14¢ 50c, 15¢ 50c for fancy; ordinary to fair lots quoted at 10¢ 15¢, and grease at 9¢ 75¢. Creamery is very dull at 10¢ 20¢.

Cheese.—Michigan cream, 11¢ 00 to 12¢ 00; skims, 10¢ 00 to 11¢ 00; New York, 12¢ 00 to 13¢ 00.

Bacon.—Marked quiet at 10¢ for fresh stock. Offerings are not so large.

Flour.—Apples—very dull; quoted at \$1 00 per 100 lbs.

Dried Apples.—Market dull; quoted at 2¢ 00 per 100 lbs. for sun dried. Evaporated stock quoted at 2¢ 00 per 100 lbs.

Foreign Fruits.—Lemons, Messina, 9¢ box, 8¢ 50 to 9¢ 50; oranges, Messina, 9¢ box, 8¢ 00 to 8¢ 50; coconuts 10¢ box, \$4 00 to \$5 00; pine apples, \$2 00 to \$2 25 per dozen; figs, layers, 11¢ 00 to 12¢ 00.

Beeves.—Steady at 22¢ 50¢ per cwt., as strained, 23¢ 50¢.

Honey.—Quoted at 10¢ 00 per 100 lbs. Market quiet.

Market.—Market first at \$1 00 per 100 lbs. and 10¢ 00 per 100 lbs. for 2nd choice.

Squires.—Quoted at 10¢ 00 per 100 lbs. for 2nd choice.

Beef.—Steady at 12¢ 00 per 100 lbs. for 2nd choice.

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Beef.—St